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A transmission system of the type described above is known from the International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) International Standard 13818-6. "MPEG-2 Digital Storage Media Command and Control" July 12, 1996 (where "MPEG-2" refers to version 2 of the Motion Pictures Expert Group standard). In modern digital broadcast systems a transmitter, e.g., a headend, typically transmits a large number of services (or channels) to a plurality of receivers, like for instance television sets or set-top boxes. Such a service can contain an audio/video stream, an interactive application (for example in accordance with version 5 of the Multimedia and Hypermedia information coding Expert Group or "MHEG-5" format), other kinds of data or a combination of these elements. An MPEG-2 transport stream is a multiplex of a number of services. Typically, a transmitter transmits several transport streams to the set-top boxes. A set-top box can tune to a specific transport stream and is then able to retrieve information from the transport stream. Such a set-top box typically has only one tuner and is thus merely able to receive one single transport stream at a time. When a user wants to look at a television program, or wants to run an interactive application, or wants to access other kinds of data the set-top box or television set tunes to the

corresponding transport stream and retrieves and processes the required data from the service as it is being broadcast at that moment.

Interactive applications like for instance tele-banking, tele-shopping or an electronic newspaper are typically broadcast in a carousel-like fashion, i.e., the therewith corresponding data sections are repeated periodically in the transport stream. For instance, both the Digital Video Broadcasting (DVB) and Digital Audio-Visual Council (DAVIC) standards have specified Digital Storage Media Command and Control (DSM-CC) protocol object carousels as known from the above mentioned document for broadcasting interactive applications. The response time of this kind of application can be improved considerably by applying some kind of caching in the set-top box, i.e. pre-fetching and storing sections in the set-top box which are likely to be accessed in the future. Otherwise, if pre-fetching and caching is not used and the set-top box wants to retrieve a part of the interactive application, the set-top box must wait until that particular part is broadcast again. In order to be able to cache data, the set-top box must have access to a storage device like for instance a hard disk. The set-top box can also use this storage device to store linear television content, like for instance short news bulletins or weather forecasts. These programs can be viewed by the user whenever this is convenient.

Please replace the paragraph on page 5 at lines 23–32 of the specification with the following:

In Figure 2 the layered structure of DSM-CC object carousels is shown.

B² The objects of a DSM-CC object carousel are broadcast in modules. Such a module is a container of objects and comprises a number of DownloadDataBlock messages (which are MPEG-2 private sections). In Figure 2 module 42 comprises the objects 32, 36 and 40. These objects are including in so-called Broadcast Interoperable (BIOP) object reference messages. In such a BIOP-message the object is preceded by a message header. In Figure 2 a first BIOP-message comprises a message header 30 and the object 32, which object may include directory information. A second BIOP-message comprises a message header 34 and the object 36, which object 36 may include stream information. A third BIOP-message comprises a message header 38 and the object 40, which object 40 may include file information.
